

## REMARKS

### 35 U.S.C. §102(b) (Claims 1-3, 5, 9, 10, 15 and 16)

Claims 1-3, 5, 9, 10, 15 and 16 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,992,755 issued to E. Seevinck (“Seevinck et al.”).

Regarding claim 1, the applicant has amended claim 1 to overcome the rejection. In particular, the applicant respectfully asserts that Seevinck et al. does not teach, “said feedback amplifier connected to receive said first and fourth differential current signals at said inverting input and said second and third differential current signals at said non-inverting input.” (claim 1) The applicants wish to highlight to the Examiner that the N1 and N3 of the Seevinck reference are only connected to the inverting input of 10. (Fig. 2A) They do not connect to the non-inverting input of 10. The applicant respectfully requests withdrawal of the rejection of amended claim 1.

Regarding claims 2 and 3, claims 2 and 3 depend from claim 1 and so contain each of its limitations. For at least the reasons stated above for amended claim 1, the applicant respectfully requests withdrawal of the rejection of claims 2 and 3.

Regarding claim 5, the Examiner refers the applicant to Fig. 2A of Seevinck et al. for anticipation of claim 5. The applicant respectfully asserts that the Seevinck et al. reference at Fig. 2A does not teach “a first output coupled to said inverting input” and “a second output coupled to said non-inverting input” for each “first and second differential transconductance amplifiers” (Claim 5). The applicant respectfully requests withdrawal of the rejection of claim 5 based on this assertion.

Regarding claims 9 and 10, claims 9 and 10 ultimately depend upon claim 5, and so contain each of its limitations. For at least the reasons stated above for claim 5, the applicant respectfully requests withdrawal of the rejection of claims 9 and 10.

Regarding claim 15, the applicant respectfully asserts that Fig. 2A of the Seevinck et al. reference does not teach converting voltage differentials to first and second differential current signals (Claim 15) (emphasis added). In Fig. 2A of Seevinck et al., N1 and N3 produce current I through node 5 because N1 and N3 couple to a single line. The applicant recites two currents (i.e. a “differential current signal”) that are output from each



transconductance amplifier ( $I_{P1}$  and  $I_{N1}$  are produced from  $gm1$  and  $I_{N2}$  and  $I_{P2}$  from  $gm2$ ) as illustrated by at least Figure 1 of the applicant's specification and as described at least at page 7, lines 1-13. Cf. Philips v. AWH Corp. et al. 415 F.3d 1303, 1321 (Fed. Cir. 2005) (stating that the specification is the single best guide to the meaning of a disputed term and that the specification "acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication" and citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)) Based on this assertion, the applicant respectfully requests withdrawal of the rejection of claim 15.

Regarding claim 16, claim 16 depends from claim 15 and so contains each of its limitations. For at least the reasons stated above for claim 15, the applicant respectfully requests withdrawal of the 102(b) rejection of claim 16.

35 U.S.C. §102(b) (Claims 1-3, 5, 9, 10, 15 and 16)

Claims 1-3, 5, 9, 10, 15 and 16 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,904,953 issued to G. McCormack ("McCormack").

Claim 1 has been amended by the applicant to overcome the present rejection. More particularly, the applicant has introduced inverting and non-inverting inputs "coupled to receive said first and fourth differential current signals at said inverting input and said second and third differential currents at said non-inverting input" (See claim 1) and respectfully requests withdrawal of the rejection of amended claim 1 based on the amendment. Because claims 2 and 3 depend from amended claim 1 and contain each of its limitations, the applicant also requests withdrawal of the rejection of claims 2 and 3.

Regarding claim 5, the applicant respectfully asserts that the McCormack reference does not teach first and second outputs for each of first and second differential transconductance amplifiers *coupled to inverting and non-inverting inputs*, respectively (Claim 5). The applicant respectfully request withdrawal of the rejection of claim 5 based on this assertion.



Regarding claims 9 and 10, claims 9 and 10 ultimately depend from claim 5 and so contain each of its limitations. For at least the reasons stated above for claim 5, the applicant respectfully requests withdrawal of the 102(b) rejection of claims 9 and 10.

Regarding claim 15, the applicant respectfully asserts that the McCormack et al. reference does not teach converting respective voltage differentials to respective first and second differential current signals (Claim 15). The McCormack reference may teach a current signal that is not differential. The applicant respectfully requests withdrawal of the rejection of claim 15 based on this assertion.

Regarding claim 16, claim 16 depends from claim 15 and so contains each of its limitations. For at least the reasons stated above for claim 15, the applicant respectfully requests withdrawal of the 102(b) rejection of claim 16.

35 U.S.C. §103 (Claims 6, 11-13)

Claims 6, 11-13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Seevinck et al. or McCormack et al.

Regarding claim 6, the Examiner states that the Seevinck et al. reference discloses the claimed invention except utilizing bipolar transistors as claimed. For at least those reasons stated above for Seevinck et al. and McCormack et al. in comparison to claim 5 from which claim 6 depends, the applicant respectfully asserts that claim 5 is not anticipated by either Seevinck et al. or McCormack et al. and respectfully requests withdrawal of the 103(a) rejection of claim 6.

Regarding claim 11, the Examiner states that the Seevinck et al. reference discloses the claimed invention except for the impedances as resistors. Claim 11 depends ultimately from claim 5 and so contains each of its limitations. For at least the reasons stated above for claim 5, the applicant respectfully asserts that the Seevinck et al. reference does not anticipate claim 5. Because claim 11 contains each of the limitations of claim 5, the applicant respectfully requests withdrawal of the 103(a) rejection of claim 11.

Regarding claims 12 and 13, the Examiner refers the applicant to the argument for rejected claim 6, and states that the "transistors (N1, N3) can be read as first and second



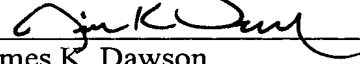
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Amdt. Dated October 10, 2005  
Reply to Office Action of July 8, 2005

transistors, respectively and transistors (N2, N4) can be read as third and fourth transistors, respectively." (Office Action at page 5) For at least those reasons stated above for claim 11, principally that claim 5 is not anticipated by Seevinck et al., the applicants respectfully assert that the Seevinck et al. reference does not anticipate claim 5. Because claims 12 and 13 ultimately depend on claim 5, they contain each of its limitations. The applicant respectfully requests withdrawal of the 103(a) rejection of claims 12 and 13 based on these points.

The applicants believe the claims are now in condition for allowance. A Notice of Allowance is respectfully requested at the earliest possible date.

Respectfully submitted,

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